DATA ITEM DESCRIPTION

Form Approved
OMB No. 0704-0188

2. TITLE	1. IDENTIFICATION NUMBER
Level of Repair Analysis (LORA) Report	DI-ILSS-80655

3. DESCRIPTION/PURPOSE

3.1 This report describes the results of the contractor's LORA program. This report describes, in detail, the specific LORA tasks performed, how they were performed, and the results of performing the tasks.

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4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
880729	A/AMXMD-EL		

7. APPLICATION/INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. It should be noted that when a government approved LORA program plan is incorporated into the contract, it forms a part of the contract, and defines the specific and discrete LORA task requirements.

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8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
		A4498

10. PREPARATION INSTRUCTIONS

10.1 General. The Level of Repair Analysis (LORA) report shall document, in detail, the results of LORA performed by the contractor in compliance with the contract and the government approved LORA program plan incorporated into the contract.

10.2 Format. The LORA report shall be in the contractor's format.

10.3 Contents. The LORA report shall include the following:

10.3.1 A discussion of the LORA performed which includes: the LORA model(s) used, and a description of the maintenance alternatives considered. The description of the maintenance alternatives includes: coverage of locations and operational scenarios of the different Test, Measurement, and Diagnostic Equipment (TMDE); maintenance personnel; any built-in-test; and, supply and maintenance facilities considered in conducting the LORA. A LORA model is defined as a computerized or manual mathematical model, or technique used to compare the relative economics and performance levels of the viable repair or discard options.

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11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

Block 3, Description/Purpose (Continued)

3.2 The principal uses for this report are to advise the government of the results from the contractor's LORA efforts and for determining contractual compliance.

3.3 This report documents and supports the contractor's analysis and recommendations on the economic, non-economic, and operational advantages to the government concerning: repair versus discard-at-failure; optimum repair levels; support equipment (which includes test program sets, built-in-test equipment, and TMDE) requirements; maintenance facility requirements; maintenance and supply support life cycle costs; spare parts provisioning; and, specific design alternatives for each of the items undergoing the LORA.

3.4 This report also documents data input into the LORA model(s) and the sources for that data along with a baseline output product from the execution of the LORA model(s).

Block 7, Application/Interrelationship (Continued)

7.2 This DID is applicable whenever a contractor is required to conduct a LORA.

7.3 This DID is used in conjunction with DI-ILSS-80654, LORA Program Plan.

7.4 This DID replaces DI-S-6169, Optimum Repair Level Analysis (ORLA) Report.

Block 10, Preparation Instructions (Continued)

10.3.2 The contractor's level of repair or discard recommendation for each item undergoing LORA. The items subjected to the LORA are those listed in the government approved LORA program plan. Included is a brief discussion of the compatability of the LORA recommendations with the operational (both performance and support) and technical (reliability and maintainability design factors) requirements of the system.

10.3.3 Identification of any recommended repair or discard level decisions, where cost is neither a necessary nor a sufficient condition, due to a conflict with defined or implied operational employment requirements, support requirements, or both are to be identified. Also to be explained are the non-economic considerations which should be considered, or result in a different decision than economic considerations determined as least-cost.

10.3.4 Identification of any economic benefits under interim contractor support, contractor logistics support, reliability improvement warranty, or any other form of contractor repair.

Block 10, Preparation Instructions (Continued)

10.3.5 A discussion of the sensitivity analysis performed along with the results of the sensitivity analysis. The discussion includes identification of the LORA model data elements varied as part of the sensitivity analysis and the specific numerical range used, rationale for that range, and identification of each numerical value varied which impacts on a contractor's LORA recommendation. The discussion of the sensitivity analysis is intended to qualify the uncertainty of design and characteristics by providing a measure of the validity of the LORA recommendations.

10.3.6 A discussion of the sensitivity of LORA decisions. This discussion is included as part of the sensitivity analysis and includes identification of the detrimental aspects of choosing alternatives, other than those selected as optimum when economic, non-economic, and operational advantages are taken into account.

10.3.7 Recommendations for updating any maintenance and logistic support planning factors.

10.3.8 A discussion of any recommendations made for updating planning factors related to maintenance and logistic support based on the LORA. Also, discussed are the established operational and readiness requirement limitations and effects that are taken into account when making level of repair and discard recommendations.

10.3.9 A tabulation of the complete system or equipment items analyzed. An explanation of how to reference the tabulation is included if LSA is not invoked. Also included are the LORA recommendations resulting from the present analysis along with any previous government approved recommendations or decisions made from past analyses.

10.3.10 A listing of LORA model data elements utilized and numerical values used for each data element in analyzing level of repair and discard alternatives. A reference to the origin of numeric data for each data element is included. A description is included of the method or methods used for deriving any estimated data. The description, in particular, covers rationale to support the reliability and maintainability values used in the LORA (along with the source for those values) and discussion of any derivation or allocation from the required values. Any estimated values are also covered in the sensitivity analysis discussion.

10.3.11 A listing of the outputs generated by execution of the LORA model(s) for the items being analyzed.

10.3.12 An addendum that documents the level of repair and discard decisions made by the government after review of the contractor's repair or discard recommendations. The decisions could range from full approval to deferred pending further analysis. The decisions documented in such an addendum are interim and may change if conditions in the acquisition program change. Therefore, the addendum should be viewed as a planning tool. Great care must be given in determining and documenting the interim level of repair and

Block 10, Preparation Instructions (Continued)

discard decisions because of the impacts and costs associated with planning around a specific maintenance structure that may change. The sensitivity analysis discussion is used to determine the risks involved in making a level of repair and discard decision.

10.3.13 A discussion of the similar systems and their maintenance structure which were compared against the system under analysis.

10.3.14 Identification of constraints that were levied against the similar systems which influenced level of repair and discard decisions on those systems.

10.3.15 Identification of specific components and assemblies which have established maintenance structures that are to be used by the system under analysis.

10.3.16 Indication and discussion of how current the LORA source data is for the similar systems, to include recommendations for updating logistic planning factors for the system under analysis, based on the LORAs conducted on the similar systems being reviewed.

10.3.17 A discussion of any recommendations to the equipment designer to influence the design of the system being developed.

10.3.18 A discussion of recommended actions by the equipment designer to incorporate the LORA decisions into the system or equipment.

10.3.19 A description of problems, conclusions, assumptions, exceptions, and actions required.